

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
23 December 2004 (23.12.2004)

PCT

(10) International Publication Number  
**WO 2004/111816 A3**

(51) International Patent Classification<sup>7</sup>: **G06F 3/033**

(21) International Application Number:  
PCT/GB2004/002538

(22) International Filing Date: 14 June 2004 (14.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0313845.0 13 June 2003 (13.06.2003) GB  
0313848.4 13 June 2003 (13.06.2003) GB  
0313847.6 13 June 2003 (13.06.2003) GB

(71) Applicant (for all designated States except US): **UNIVERSITY OF LANCASTER** [GB/GB]; University House, Bailrigg, Lancaster LA1 4YW (GB).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **HUDSON, James, Alan** [GB/GB]; 318 Radcliffe Road, Fleetwood, Lancaster FY7 7NR (GB).

(74) Agent: **ALTON, Andrew**; Urquhart-Dykes & Lord LLP, Tower North Central, Merrion Way, Leeds LS2 8PA (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

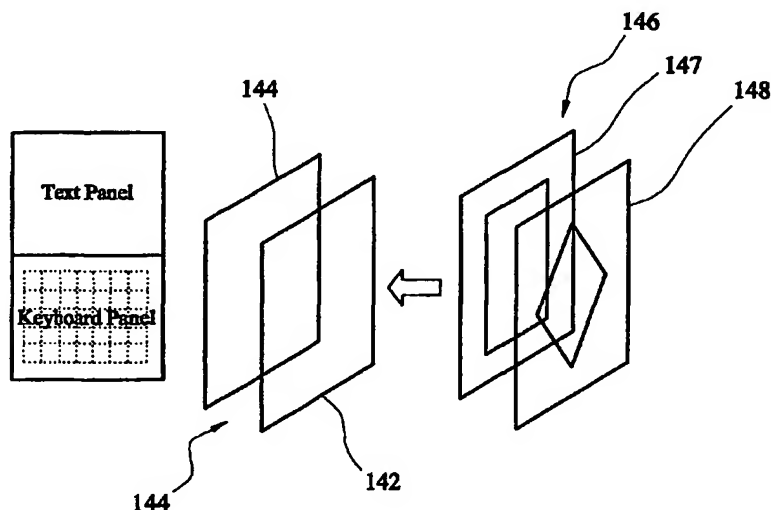
Published:

— with international search report

(88) Date of publication of the international search report:  
6 April 2006

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **USER INTERFACE**



(57) Abstract: A user interface for a display of an electronic device is described. The user interface includes a background layer for displaying an interface and at least a first animated control element overlaid on the back ground layer. The control element has a plurality of functions associated with it. Each of said functions is executable by making a 2D gesture associated with a one of said plurality of functions in a region of the user interface associated with the control element. A device including such an interface and computer code for providing such an interface are also described.

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/GB2004/002538

## A. CLASSIFICATION OF SUBJECT MATTER G06F3/033

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	"MULTIFUNCTIONAL GRAPHICAL ENTITIES VIA TEMPORAL MULTIPLEXING" IBM TECHNICAL DISCLOSURE BULLETIN, IBM CORP. NEW YORK, US, vol. 35, no. 6, 1 November 1992 (1992-11-01), page 280, XP000314141 ISSN: 0018-8689 the whole document	1-21, 26-46
A	----- EP 0 660 218 A (XEROX CORPORATION) 28 June 1995 (1995-06-28) column 5, line 55 - column 9, line 21; figures 1-10	1-21, 26-46
A	----- US 5 864 635 A (ZETTS ET AL) 26 January 1999 (1999-01-26) column 1, line 53 - column 2, line 20 ----- -/-	9,10,38, 39

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*G\* document member of the same patent family

Date of the actual completion of the international search

3 November 2005

Date of mailing of the international search report

17. 01. 2006

Name and mailing address of the ISA  
European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Mouton, B

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB2004/002538

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>EP 0 637 795 A (XEROX CORPORATION)  8 February 1995 (1995-02-08)  page 3, line 19 - page 4, line 17; figures  2-4,8</p> <p style="text-align: center;">-----</p>	

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/GB2004/002538

### Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

### Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-21, 26-46

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-21,26-46

user interface for a computer system comprising an animated control element associated with a plurality of functions, where a function is executed by making a 2D gesture over the control element, characterised in that a 2D gesture is associated with a helper function causing help information relating to the functions associated with the control element to be displayed.

---

2. claims: 22-25

user interface for a computer system comprising an animated control element associated with a plurality of functions, where a function is executed by making a 2D gesture over the control element, characterised in that the control element comprises an animation axis along which alternating bands of light and dark colours are progressing, where the thickness of the bands vary as they progress.

---

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB2004/002538

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0660218	A	28-06-1995	DE 69429237 D1	10-01-2002
			DE 69429237 T2	13-06-2002
			JP 3546337 B2	28-07-2004
			JP 7200126 A	04-08-1995
			JP 2004206731 A	22-07-2004
			JP 2004206732 A	22-07-2004
			US 6094197 A	25-07-2000
-----				
US 5864635	A	26-01-1999	JP 3664571 B2	29-06-2005
			JP 10069344 A	10-03-1998
-----				
EP 0637795	A	08-02-1995	DE 69427004 D1	10-05-2001
			DE 69427004 T2	02-08-2001
			JP 7064756 A	10-03-1995
			US 5485565 A	16-01-1996
-----				